

## **REMARKS/ARGUMENTS**

Reconsideration of this application is requested. Claims 1-5, 7 and 9-21 are in the case.

### **I. THE OBVIOUSNESS REJECTION**

Claims 1-5, 7 and 9-21 stand rejected under 35 U.S.C. §103(a) as allegedly unpatentable over U.S. Patent 4,178,394 to Kumar in view of Nigam (Nigam, P. 2000, "Mycelial Fungi", Encyclopedia of Food Microbiology, Vols. 1-3, Robinson *et al.*, Eds. Academic Press, pp. 2034-2044). That rejection is respectfully traversed.

As claimed, there is provided a composition comprising fungal particles of a filamentous fungus and a second proteinaceous material. The ratio of the weight on a dry matter basis of the proteinaceous material to the weight on a dry matter basis of the fungal particles in the composition is greater than 1, and the proteinaceous material comprises a cereal protein.

The present inventors have discovered, surprisingly, that fungal particles can be added to a proteinaceous material, such as gluten, so as to delay the development of texture in the gluten. This allows other ingredients to be blended with the gluten over a period of time. The inventors have found that foodstuffs, such as sausages, prepared using this methodology, have very acceptable properties (specification, page 14, lines 6 to 22 and page 16, Example 5).

Turning to the cited art, neither Kumar nor Nigam recognizes the problem associated with the rapid gelation of gluten, and neither document provides or suggests

a solution to this problem. Neither reference is relevant, therefore, to the presently claimed invention.

Kumar is not concerned with rapid gelation of gluten. This is because Kumar approaches production of sausage analogs in an entirely different way to that in accordance with the present invention. Kumar blends five separate phases, with the gluten phase already being in the form of a solid mass. Kumar has no interest in or reason for slowing down the gelation of gluten. In fact, if gluten gelation was retarded, this could be detrimental because, at the very least, it would take longer to prepare the gelled gluten with little, if any, associated benefit.

The Action acknowledges (paragraph 6) that Kumar is silent as to the edible protein fibre being fungal protein. Kumar does not disclose fungal particles as described in claim 1. Kumar is also silent as to the ratio of the fibrous material to the gluten, and this is also acknowledged in the Action.

The Action asserts, however, that a skilled person would combine Kumar and Nigam and arrive at the present invention. This is not correct. There would have been no motivation for one of ordinary skill in the art, as of the filing date of the application, to combine Kumar and Nigam because neither reference recognizes the problem associated with the rapid gelation of gluten, and neither document provides or suggests a solution to this problem. Even if such a combination had been attempted by one of ordinary skill (it is believed this would not have occurred), the invention as claimed would not have resulted or have been rendered obvious thereby, because there is no suggestion in Kumar or Nigam, taken singly or together, of the effect of filamentous fungus on proteinaceous material such as gluten. Moreover, there is no appreciation in

Kumar or Nigam that filamentous fungus can be used to retard the development of texture in gluten and, thus, allow other materials to be blended into the gluten, thereby producing an advantageous foodstuff. Nigam actually makes five individual and distinct phases (column 4, line 43) and blends all five phases together, with one of these phases is a **gelled** mass of wheat gluten (see column 2, line 50 and column 5, line 21).

In addition, as is apparent from the specification, the claimed composition comprising fungal particles and proteinaceous material at the ratio as defined in claim 1 is advantageous in facilitating processing of proteinaceous materials such as gluten. One of ordinary skill on reading Kumar and/or Nigam at the time of filing of the application would not have appreciated such an advantage, since neither Kumar nor Nigam addresses the problem, nor suggests a solution, with regard to the rapid gelation of gluten. In addition, neither document provides any motivation for one of ordinary skill to arrive at the solution as reflected in the presently claimed invention.

In paragraph 9 of the Action, it is suggested that Example 4 of Kumar is relevant to claims 12 to 15 since:

“...the amount of protein fiber.....would likely fall within the ranges as claimed by Applicant”.

In response, there is nothing in Kumar suggesting that compositions described in Kumar fall within the terms of any of the claims of the present application. Example 4 of Kumar states that it is the same as Example 2 “except that part of the textured protein concentrate was replaced with structured protein fibre”. Thus, the example does not even disclose how much was replaced (1% or 99%?) Irrespective of how much is

replaced, the composition will not be produced in accordance with the present invention.

It not possible, therefore, to find any support for the assertion in the Action that "the amount of protein fibre used...would likely fall within the ranges as claimed by applicant". In fact, it is believed that, under no circumstances envisaged in Kumar, would the relevant ranges fall within the subject matter of present claim 1.

In summary, one of ordinary skill would not have been motivated, based on Kumar and Nigam, taken singly or in combination, to arrive at the subject matter of the claims of the present application. Kumar and Nigam do not recognise the problem associated with the rapid gelation of gluten with which the present invention is concerned, and do not suggest the solution.

The cited prior art clearly fails to give rise to a *prima facie* case of obviousness. Withdrawal of the obviousness rejection is respectfully requested.

## II. ABSTRACT

A new Abstract in better form is presented on a separate sheet attached to this response. No new matter is entered.

Favorable action is awaited.

Respectfully submitted,

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